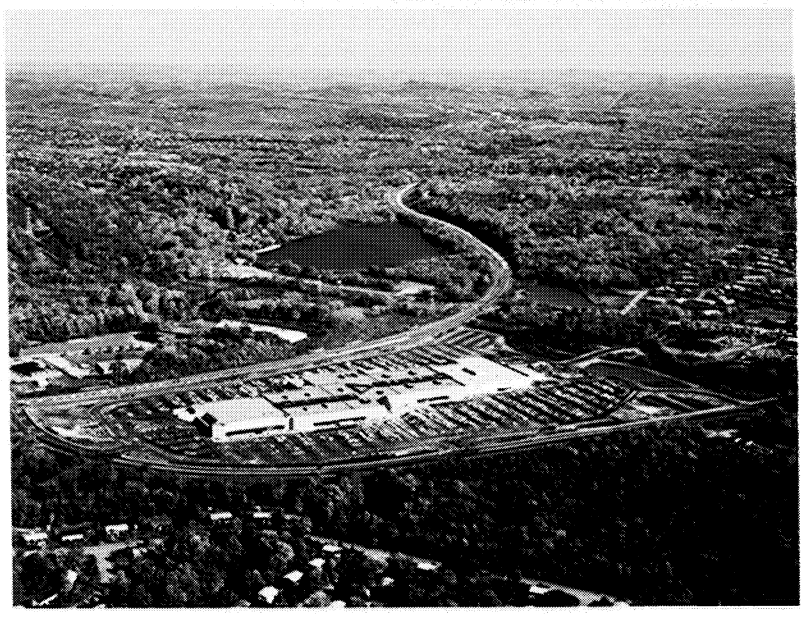
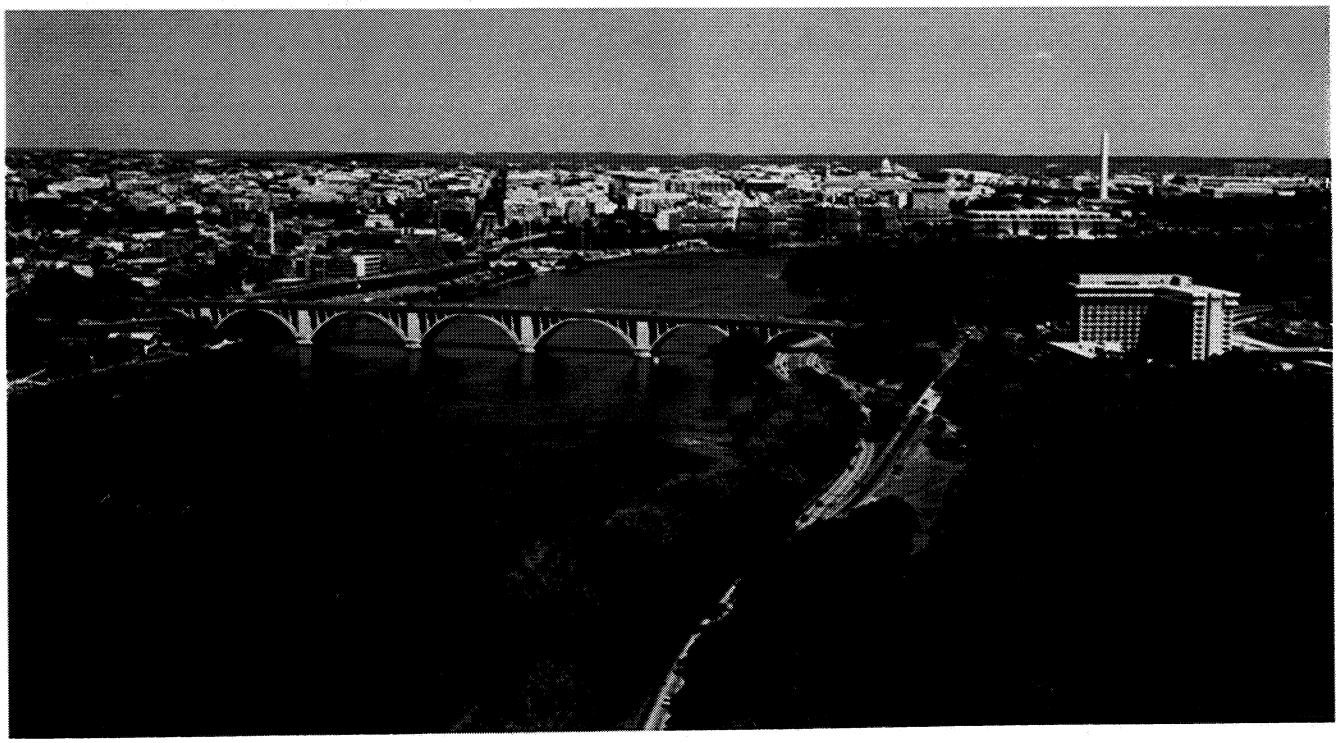


Aerial Photography

The accompanying photos exemplify the work of photographer John Hill, who operates Tigerhill Studio, Western Springs, Illinois. Hill, a licensed commercial pilot with a civil engineering degree and military experience in photo interpretation, began the business in 1982 after more than 20 years in construction management. He specializes in high quality oblique aerial photography, supplying three-dimensional frontal photos for such clients as real estate developers, architects, advertising agencies, government agencies, hotel and resort operators, oil companies, museums and Chambers of Commerce.

At upper left is an oblique view of the Art Institute/ Michigan Avenue area of Chicago, Illinois. At left is an aerial view of Jefferson Mall, Yorktown, New York, taken on an assignment flown for the developer and general contractor. The bottom photo pictures a segment of Washington, D.C. along the Potomac River. At right is the Chicago Loop skyline and at right below is the G.D. Searle headquarters building in Skokie, Illinois. Hill says the latter two photos illustrate the quality that can be attained on a hazy day with the right camera and proper film; he credits a NASA Industrial Applications Center with an assist in reducing his operating costs and in his selection of cameras, lenses and films for the demanding field he chose to enter.

In preparing his business plan for entering this highly specialized field, Hill—aware of many NASA advances in photography, remote sensing and computerized image enhancement—sought to build an information base on space age technology related to his work. He found the information available in libraries limited and often outdated, so he contacted—



through the Small Business Administration office in Chicago—the New England Research Applications Center (NERAC), Storrs, Connecticut, a data retrieval service jointly sponsored by NASA and the University of Connecticut. Hill asked NERAC to conduct a literature search to identify the latest developments in a range of subjects relating to camera optics and performance.

NERAC searched the NASA data base and provided extensive information on aerial, aerial oblique and architectural photography, electro-optics, image enhancement and processing. Hill followed up the NERAC report through personal contacts with manufacturers of photographic equipment and film, aerial surveyors, processing laboratories and camera retailers. As a result of this cooperative research effort, Hill was able to effect an immediate and substantial reduction in overhead costs. Much of the saving stemmed from his switch from a heavy military aerial camera to a lighter weight, more manageable camera that makes sharper pictures and can be used in a small fixed-wing airplane as well as in more costly helicopters. Additionally, he is using NERAC-provided information on electro-optics, image enhancement, microwave and infrared systems to plan for his introduction of advanced optics. Hill estimated that NERAC's assistance will contribute to an increase of about $100,000 in 1984/85 revenues and significantly strengthen his competitive position for future work.